Background: A 19-year-old women’s lacrosse player presented with bilateral medial shin pain secondary to increased running during athletic activity. Previous history of injury includes iliotibial band syndrome, patellar-femoral syndrome, and medial tibial stress syndrome, all three diagnosed within the past season. The patient’s current complaint is bilateral shin pain along the lower 1/3 medial tibia that was categorized as a sudden but dull pain while running. She had previously worn foot orthotics, but had not worn them during her intercollegiate participation. Non-weight bearing observation revealed a forefoot varus with a normal medial longitudinal arch. Weight bearing observation revealed a loss of the medial longitudinal arch secondary to excessive pronation, internal tibial and femoral rotation, and an anterior pelvic tilt. Gait analysis revealed excessive pronation during the midstance along with prolonged pronation during the terminal stance. She was tender to palpation on the soft tissue along the lower 1/3 medial tibia bilaterally with a greater amount of tenderness in the left tibia. ROM and MMT testing was considered WNL. The percussion test, bump test, and tuning fork test were all negative for fracture but a positive finding for the navicular drop test was found. Differential Diagnosis: Exertional compartment syndrome, medial tibial stress syndrome, and pes planus. Treatment: She was diagnosed with medial tibial stress syndrome secondary to supple pes planus by the Athletic Trainer. As such, physician referral and diagnostic testing were not warranted. She was initially treated using cryotherapy in conjunction with electrical stimulation bilaterally over her medial tibia before all practices, games, and workouts to assist in modulating her pain. Also, she was taped bilaterally using a modified ankle taping that pulled the navicular into place and restricted movement. Finally, semi-rigid foot orthotics were ordered to reduce the amount of navicular drop during athletic activity and rigid foot orthotics to use during ADLs for full structural control. The patient’s pain gradually declined and she progressively returned to full athletic participation. Uniqueness: Foot abnormalities, specifically excessive pronation commonly occur congenitally; however, this case in unique because the patient was misdiagnosed and/or improperly treated for the past year. Her supple pes planus was the origin of her past two orthopedic injuries. This case is also unique because the patient was previously prescribed foot orthotics, yet she was left undiagnosed of having bilateral dropped navicular bones secondary to supple pes planus. Finally, the Athletic Trainer also had to be imaginative in creating a modified ankle taping that would hold the navicular in place while the orthotics were being delivered. Conclusion: It is important to consider the influence of foot structure on various pathologies. Although many individual functions normally with abnormal foot structures, foot abnormalities can predispose an individual to a variety of overuse conditions, some of which the present patient previously suffered. Athletic Trainers should always perform postural and gait analysis during lower extremity and spinal evaluations. These analyses are especially critical when a patient presents with numerous overuse syndromes within a short period of time. Many clinicians are limited in the amount of time available to perform a complete evaluation which includes
encompassing gait and postural analysis; however, this case demonstrates the necessity for completing such analysis to correct the underlying cause of the problem rather than simply treating the symptoms. Finally, this case helps demonstrate the need for Athletic Trainers to familiarize themselves with the past medical histories of their patients.  **Word Count:** 565